GOUR MAHAVIDYALAYA

DEPARTMENT OF GEOGRAPHY

Program name: CBCS

PROGRAMME OUTCOMES

PO01: Acquire knowledge of geomorphological and geotectonic processes and their formation to understand various landforms, their origin, and the processes through which landforms have gone or are going.
PO02: Gain proficiency in surveying and levelling fields using a prismatic compass, dumpy level, and theodolite, along with map projection skills to become adept cartographers.
PO03: Explore different types of thematic mapping with statistical techniques to enhance students' higher learning and research abilities.
PO04: Provide a brief overview of ancient and contemporary geographical thought and its impact on the evolution of modern geography.
PO05: Create a map using Quantum GIS and modern geographical map-making techniques.
PO06: Conduct tests on soil samples and determine the nutritional status of the identified soil, aiding in future agricultural practices.
PO07: Conduct tests on water samples to determine water quality, contributing to the assessment of drinking water quality and other types of water, and facilitating future research.

COURSE OUTCOMES

Semester-I

GEOMJ-MC-01: Geotectonics and Geomorphology (Theory)

- Learners will gain a comprehensive understanding of the fundamental principles and concepts of geomorphology and they will understand the earth's tectonic and structural evolution.
- Learners will be able to acquire a comprehensive understanding of the composition and dynamics within the earth's interior.
- Learners will gain insight into the dynamic nature of the earth's crust and its significance in the formation of landforms and will be able to summarize and critically evaluate different models explaining how landforms develop.
- Learners will be able to identify various types of landforms and establish their connections.
- Learners will be able to analyse the pivotal roles played by structures and processes in shaping landforms, interpret topographic maps, and apply knowledge gleaned from geomorphological investigations.

Geotectonics and Geomorphology (Practical)

- Learners will be able to identify and analyse the survey of India topographical map and they will be able to interpret the features and their interrelationship which will help them in future research in practical fields.

GEOMJ-MC-02: Cartographic Techniques (Theory)

- Learners will be able to understand the basics of cartography and its application in mapping and gain knowledge about the map scale.

- The learners will gain a better knowledge of how to represent locations in the real world on a two-dimensional surface through earth models, coordinate systems and map projections.
- Learners will understand the various data representation techniques and their field of application.

Cartographic Techniques (Practical)

- Students shall gain the skills of basic conversion and construction of map scale.
- Learners will get the basic knowledge and skills of transformation procedures from 3-dimensional globe to 2-dimensional maps.
- Skills about the techniques of geographic data representation and interpretation shall be developed in the learners.

GEOMJ-SEC-01: Elementary Statistics (Theory)

- Learners will gain knowledge about the organisation and representation of data and will understand how geography employs statistics and the crucial role of data in geographical studies.
- Learners will be equipped with various sampling techniques employed in geographical research and acquire the expertise to create questionnaires and schedules for data collection in geographic research.
- Learners will delve into the utilization of statistical methods to comprehensively comprehend spatial phenomena through univariate and bivariate statistical techniques using geographical data.

Elementary Statistics (Practical)

- Learners will be able to classify, organise and represent geographical data into different statistical tables and graphs.
- Learners will be able to utilize statistical methods for analysing spatial phenomena through univariate and bivariate statistical techniques using geographical data.

Semester-II

GEOMJ-MC-03: Human Geography (Theory)

- Learners will acquire knowledge and develop an understanding of concepts, processes, elements, and methods of Human Geography.
- Learners will also acquire knowledge on the history and evolution of humans.
- It helps learners understand the relationship between man and environment in the light of development-environment conflict.
- Ideas about space, society and culture shall be developed among learners.

Human Geography (Practical)

- Learners will be able to identify and analyse the spatial dynamics of human population and able to apply the techniques of population potential, mean and median centres of population.
- Learners will gain proficiency of the various indicators and measures of human development and able to calculate human development indices, and gender inequality index.

GEOMJ-MC-04: Geography of India (Theory)

- Learners will understand the geography of our country and shall acquire an understanding the relationship between physiography and drainage, climate, and soil and will also learn about different physiographic, economic, and agricultural regions of India and develop a solid understanding of the concept of region and its importance in planning and development.
- Learners will understand different mineral and power resources and become aware about

the resources and its conservation. ● Learners will acquire knowledge on the physical and economic setup of West Bengal.
Geography of India (Practical)
● Learners will be able to identify different types of rocks and minerals and their importance. ● Learners can understand different types of geological structure and will be able to draw geological sections and interpret geological maps.

GEOMJ-SEC-02: Basics of Surveying Techniques (Theory)
● Students will be able to understand the concept, principle, classification, application of surveying and levelling and will learn the usages of various survey instruments. ● They will be able to understand the techniques of topographic survey and its representation on map.
Basics of Surveying Techniques (Practical)
● Students will be able to learn the handling and application of basic surveying instruments and techniques. ● Will be able to apply skills to conduct traverse surveys & calculate the area. ● They will learn to use theodolite (for the measurement of horizontal and vertical angle) and dumpy level for determination of reduced levels of points ● and contouring using these elevation values.

GEOMJ-DPE-01: Summer Internship/ Apprenticeship/Project/ Community Outreach (IAPC)- Project
● Through project construction, learners will acquire fundamental problem- solving skills. ● Learners will be able to achieve their professional skills through project construction and delivery.

Semester-III

GEOMJ-MC-05: Climatology (Theory)
● Learners will gain the ideas of climate as the result of mass and energy accumulations over time, and they will also be able to identify atmospheric processes and mechanisms. ● Learners will understand the types and regional pattern of climates. ● Learners will identify the natural causes of climate change and distinguish how these causes differ from anthropogenic causes of climate change.
Climatology (Practical)
● Learners will gain the basic skills of handling manual weather instruments and the collection of weather information. ● Learners will be able to construct various climatic graphs for the purpose of representation of climatic data. ● Learners will be able to analyse and interpret weather maps and will understand the spatial behaviour and relationships of weather phenomena.

GEOMJ-MC-06: Population Geography (Theory)
● Learners will gain the concept of population geography and will be able to understand the distribution of population and its problems, population dynamics over space and time. ● Learners could understand different population policies & its importance and the contemporary population issues, and mitigation strategies.
Population Geography (Practical)
● Learners will be able to analyse the population data, determine the projected population

and measure the densities of population. ● Learners will be skilled in various measurements of vital statistics of the human population.

GEOMJ-SEC-03: Basics of Cadastral Surveying (Theory)
● Learners will understand the necessity of the land cadastre and land information systems in society and will be able to explain it. ● Learners will acquire the knowledge about the theoretical basis of creation and functioning land cadastres and will be able to explain it. ● Learners will be able to acquire information from the land cadastre and from the other land information systems. ● Learners will understand the basic trends of development land cadastres and land information systems and is able to explain it. ● Learners will be able to compile a cadastral survey as well as land survey with the help of different tools and techniques.
Basics of Cadastral Surveying (Practical)
● Learners will be skilled in land survey concepts and techniques. ● Learners will be able to use the surveying instruments for determining land area, horizontal and vertical position of points. ● Learners will be skilled in the use of chains in survey, plane table survey, prismatic compass survey, theodolite, and dumpy level survey.

Semester IV

GEOMJ-MC-07: Economic Geography (Theory)
● Learners will acquire a detailed, informative, and analytical study of economic activities and resources of the nation and the world. ● Learners will achieve the ideas of the present status of economy and human as well as material resources of the country and the world.
Economic Geography (Practical)
● Learners will be able to analyse agricultural efficiency and its field applications and will gain the different measures of transport connectivity and accessibility and its applications. ● Learners will be skilled to analyse spatial industrial development with suitable measures and their applicability.

GEOMJ-MC-08: Settlement Geography (Theory)
● Learners will be able to acquire the ability to analyse the type, layout, and nature of urban and rural settlements. ● Learners will also identify the problems related to the settlement and develop a plan to solve the issues.
Settlement Geography (Practical)
● Learners will be able to analyse the spatial distribution and interaction measures of settlement. ● Learners will be to analyse the hierarchy of urban settlements, different measures, and their applicability and also to measure the threshold services and urban influence.

GEOMJ-MC-09: Biogeography (Theory)
● Learners will perceive the physical environment and organisms of the planet clearly. ● Learners will acquire the ability to solve environmental problems related to the habitats of organisms.
Biogeography (Practical)
● Learners will be able to measure the richness and evenness of biodiversity. ● Learners will be able to calculate and determine the temporal loss of different species. ● Learners will be able to measure the level of ecological footprint.

GEOMJ-DPE-01: Summer Internship/ Apprenticeship/Project/ Community Outreach (IAPC)- Project
● Through project construction, learners will acquire fundamental problem- solving skills. ● Learners will be able to achieve their professional skills through project construction and delivery.